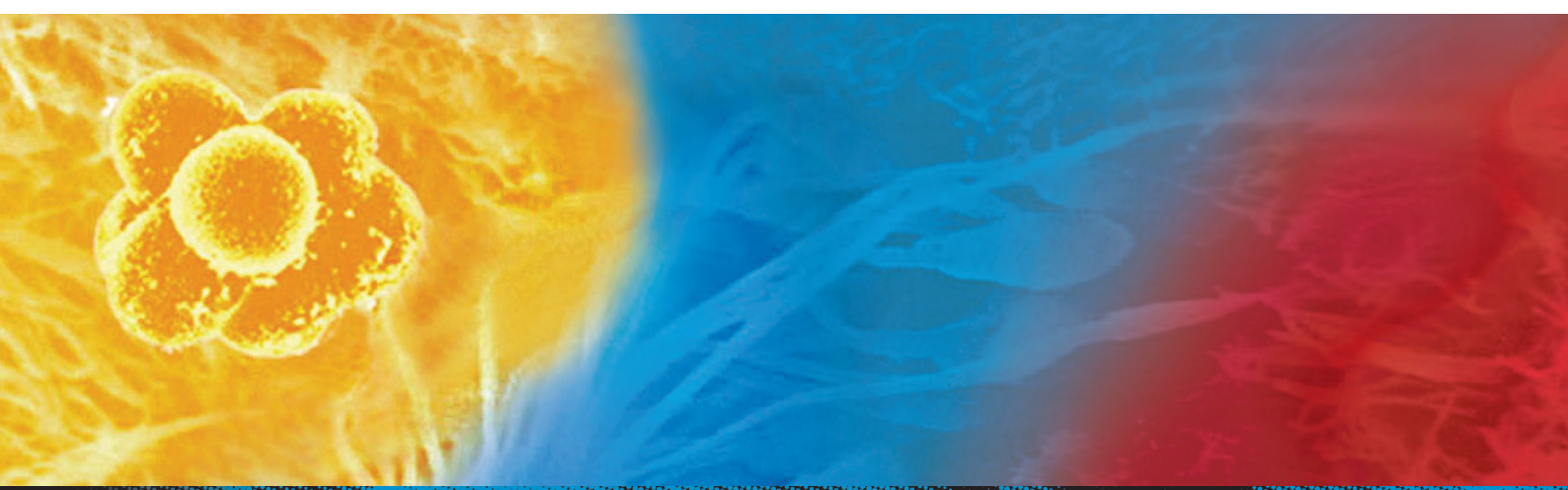




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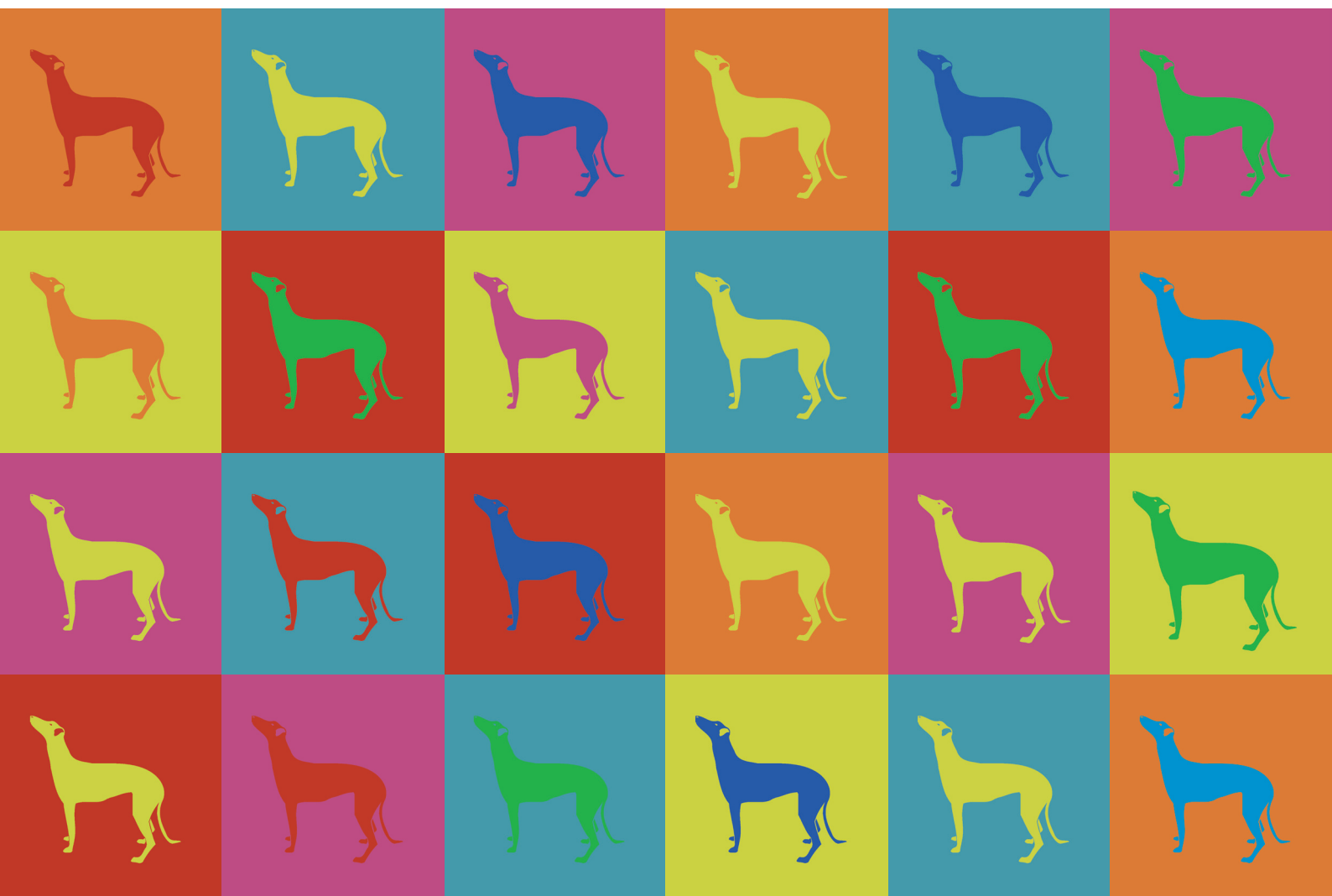


Animal Reproduction Technology

Canine



minitube



*Innovative ideas, modern production techniques
and a keen appreciation of product quality
are the basic ingredients of Minitube.*

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WORLD WIDE ACTIVITIES

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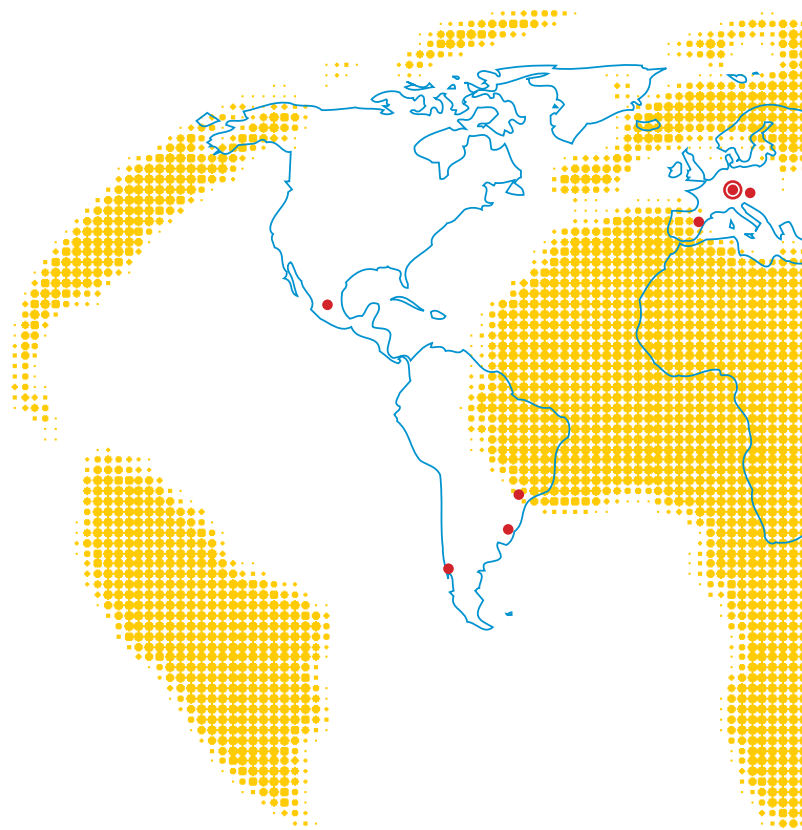
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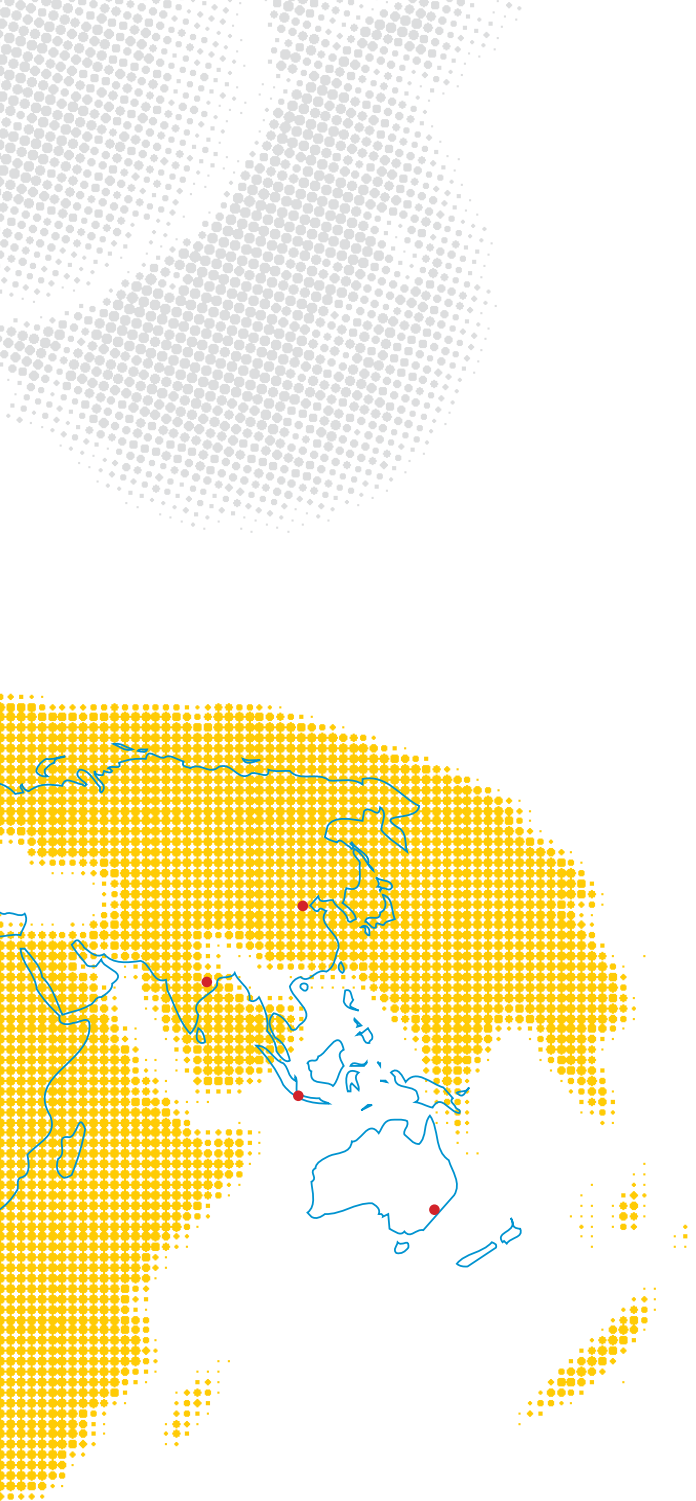
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Minitube is a registered trademark of Minitüb GmbH, Germany.





We need detailed knowledge of reproductive physiology in order to ensure that you are successful in the use of artificial insemination. Veterinarians and agro-scientists specialised in this field therefore, are responsible at Minitube for product development and for consulting with our clients. The technical demands of semen processing and preservation also require knowledge and expertise in other fields, such as electronics, sensorics, mechanics, chemistry, cryobiology and many others. At Minitube, these demands are met by specially-trained engineers and scientists.

For product development, our teams of veterinarians and engineers cooperate closely. Together, they offer all the knowledge and experience necessary to guarantee the best possible results.

Minitube International offers you specialised training programs, courses and technology transfer. In close cooperation with renowned research institutions we conduct fundamental research concerning assisted reproduction technologies as well as applied research that leads to improved techniques in production, evaluation and conservation of semen and embryos.

Originating in Tiefenbach, Bavaria, Minitube has established its competence over many years in more than 100 different countries all over the world. With several companies, highly-trained local representatives and multilingual professionals, we keep in contact with the international AI industry. Innovative ideas, modern production techniques and a keen appreciation of product quality are the basic ingredients of our knowledge and your success.

We thank you for your interest and your confidence placed in us.

DR. CHRISTIAN SIMMET

CEO

SEMEN COLLECTION

Canine collection system

Your benefits

- Allows evaluation of stud dog penis while being collected
- Colour coded funnels to divide the different ejaculate fractions. Dividing the fractions is always useful in preventing unwanted bacteria and contaminations by prostatic fluid.
- Spill-proof funnel design prevents accidents during the collection process
- Non-spermicidal materials are easy to clean, sterilise and re-use
- Samples immediately ready for analysis, centrifugation or extension

Components:

- 3 colour coded funnels (red, blue and white)
- 4 centrifuge tubes, 15 ml

Canine collection system

REF. : 17500/0203

Alternatively available:

Semen collection funnel, disposable, 100/box REF. : 11521/0000

Accessories

Semen collection glove, extra sensitive, sperm safe, 100/box

Size M REF. : 11128/0055

Size L REF. : 11128/0060

Size XL REF. : 11128/0065

Glove dispenser REF. : 11128/0010

Hygienic glove for the protection of the collection glove,
100/package

REF. : 11128/0100

ReproJelly, non spermicidal lubricant, water soluble,
tube with 100 ml, resealable

REF. : 11907/0100

Electro ejaculator

Electro ejaculator set consisting of heavy-duty carry case with power supply unit and connecting cables for external battery.

Power supply: (17 V) 100-240 V DC

Electro ejaculator REF. : 11900/0000

Electro ejaculator probe, 3/8" REF. : 11900/0509

Electro ejaculator probe, 1/2" REF. : 11900/0510



ANDROVISION® – MORE THAN CASA

Integrated sperm functionality analysis

This highly efficient automated system for computerised semen analysis stands out for the integration of the classic CASA analysis with more advanced assays for sperm functionality. Concentration and motility as well as sperm integrity and viability can be assessed accurately and quickly with up to 1000 cells per field, making AndroVision® the perfect tool for the objective and complete semen evaluation. All images and data are stored for later review.

An analysis report can be generated as a hard copy print or a digitised file. These features and more make AndroVision® the ideal choice for canine semen assessment in a research and production lab.



AndroVision® software

with PC and accessories

REF. : 12500/0000

AndroVision® camera

high speed colour camera

REF. : 12500/4200

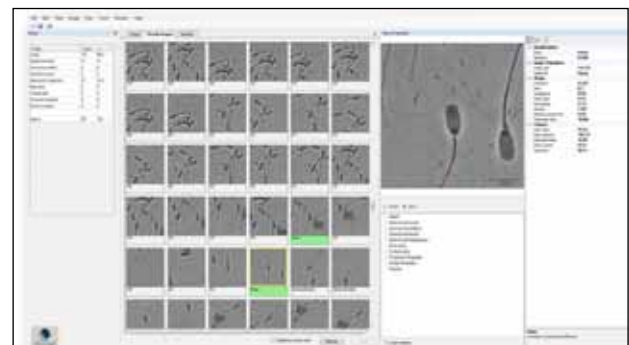
AndroVision® software modules

Morphology and morphometry:

Interactive system for analysis of sperm morphology and morphometry. Identifies sperm of stained and unstained samples and measures length and width of the sperm head, head shape and midpiece asymmetry of each single sperm cell (acc. to Krüger). Results can be classified into a large range of morphologic abnormalities. The classification according to morphological criteria is a self-learning process.

Module Morphology and morphometry

REF. : 12500/1300



Viability:

Automated count of the percentage of membrane intact sperm, based on a double stain fluorescence assay.

Module Viability*

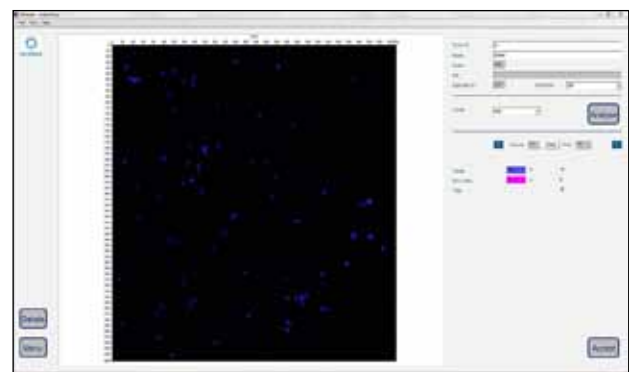
REF. : 12500/1400

Acrosome integrity:

Automated count of sperm with damaged acrosomes, based on a double stain fluorescence assay.

Module Acrosome integrity*

REF. : 12500/1600



* requires fluorescence microscope

SEMEN EVALUATION

Phase contrast microscope MBL 2000

Functional microscope for semen analysis with phase achromatic objectives 10x, 40x, 100x, heating system with temperature control unit HT50 with digital temperature display and freely selectable temperature adjustment

Binocular REF. : [12010/2000](#)

With eyepiece video camera and monitor REF. : [12010/2100](#)



Photometer SDM 1

The SDM 1 is a compact, highly accurate photometer developed for measuring sperm cell concentrations. It can be calibrated for bovine, canine, equine, porcine, and small ruminant species. Cleaning is simple, maintenance is minimal. The semen concentration is displayed in million sperm cells/ml.

- No dilution of semen samples necessary
- LED light source provides stable output
- Cuvette is securely fixed in the correct measuring position
- Calibration is performed automatically with each sample measurement

Photometer SDM 1, calibrated for canine semen REF. : [12300/0103](#)

Optionally available:

Multispecies Software

for reprogramming to other species REF. : [12300/0130](#)

Accessory

Microcuvette for SDM 1, 100/box REF. : [12300/1111](#)



SEMEN EVALUATION

Semen dyes

Spermac, semen dye for morphological evaluation,
4 x 50 ml REF. : [15405/0000](#)

Farelly stain, for morphological evaluation,
consisting of 3 components, 250 ml each REF. : [15405/0026](#)

Eosin G, solution for supravital staining,
50 ml REF. : [15405/0025](#)

Nigrosin, solution for supravital staining,
50 ml REF. : [15405/0029](#)



Microscopy supplies

Microscope slide, 76 x 26 mm, 50/box REF. : [15400/2400](#)

Cover glass, 18 x 18 mm, 100/box REF. : [15401/0990](#)

Immersion oil, 8 ml REF. : [12000/0101](#)



Counting chambers (hemocytometers)

Thoma new REF. : [15150/4771](#)

Neubauer improved REF. : [15152/4421](#)

Bürker REF. : [15153/0000](#)

Pipettor

Pipettor 10 – 100 µl REF. : [12425/4810](#)

Tips for pipettor REF. : [12425/9409](#)



SEMEN EXTENDERS

Caniplus Chill

Caniplus Chill is a culture medium for chilled dog semen. The medium is usually completed by adding fresh egg yolk. The plain medium can be used without modification for preserving dog semen during up to 3 days. Caniplus Chill with added egg yolk assures high semen quality for up to 8 days.

Dog semen preserved in Caniplus Chill is best maintained at +5°C.

Caniplus Chill, 20 ml

REF. : [13700/0030](#)



Caniplus Freeze

Caniplus Freeze is a medium for freezing dog semen with the one-step method. The unique formulation maintains post thaw motility at a high level. It contains glycerol as freezing protector. Egg yolk is added by the user. The convenient one-step freezing protocol allows semen processing at room temperature, therefore no additional cooling equipment is required.

Caniplus Freeze, 20 ml

REF. : [13700/1030](#)



Caniplus Enhance

Caniplus Enhance is a medium for AI in dogs. It is added to frozen-thawed, chilled or fresh semen prior to insemination, especially when semen quality is not optimal. It contains sperm motility enhancing ingredients thus improving the breeding performance of the used semen.

Caniplus Enhance, 20 ml

REF. : [13700/0031](#)



Water bath

Electronic temperature control, stainless steel, with grid and lid

7 l, inner dimensions:

240 x 210 x 140 mm (W x H x D)

REF. : [14078/0001](#)

10 l, inner dimensions:

350 x 210 x 140 mm (W x H x D)

REF. : [14079/0001](#)

Power supply: 115 V/60 Hz or 230 V/50 Hz



TRANSPORT OF CHILLED SEMEN

Equitainer

Your benefits

- A world-wide proven system for cooling, storage and transport of fresh semen
- The warm semen is automatically and gently cooled down to the ideal storage temperature within 6 to 10 hours
- The desired temperature is reliably maintained for about 70 hours
- Very high level of protection against potential x-ray induced damage of the enclosed semen sample

Equitainer cup style

Complete with cup-style isothermaliser, sterilised plastic cup with lid, 2 ballast bags and 2 coolant cans

REF. : 17220/0010

Equitainer tube style

Complete with tube-style isothermaliser, to fit two 50 ml tubes, 6 x 50 ml tubes and 2 coolant cans

REF. : 17220/0015

Accessories

Coolant can (1) REF. : 17221/0120

Thermo bag (2) REF. : 17221/0130

Isothermaliser cup style (3) for 240 ml cup REF. : 17220/0011

Isothermaliser tube style (4)
for two 50 ml tubes REF. : 17220/0016

Inner plastic cup (5), 240 ml, graduated, with lid REF. : 17221/0240

50 ml tubes (6) REF. : 17220/0017



Neopor transport box

Minitube transport box made of highly insulating Neopor, complete with two ice-packs, two syringes (5 and 10 ml) and outer shipping carton, holding optimal temperature for appr. 45 hours.

REF. : 17229/0005



INSEMINATION

CVI balloon catheters for canine vaginal insemination

Your benefits

- Designed to mimic the natural breeding process
- Available in three sizes to accommodate a variety of breeds
- Stainless steel spine with protective sheath to enhance rigidity
- Luer lock injection port with reflux check valve
- Inflatable balloon prevents unwanted back flow of semen
- Balloon equipped with monitoring pilot balloon and Luer lock check valve

CVI Large, CH 36

for medium to large sized dogs. Length: 400 mm.
Sterilised, single use, with 10 ml syringe, 1/package

REF. : 17500/0035

CVI Medium, CH 18

for small and medium sized dogs. Length: 250 mm.
Sterilised, single use, with 5 ml syringe, 1/package

REF. : 17500/0034

CVI Small, CH 18

for small sized dogs. Length: 120 mm.
Sterilised, single use, with 5 ml syringe, 1/package

REF. : 17500/0032



Rigid AI pipettes for dogs

Rigid plastic pipettes with piece of tubing and Luer adapter

Length: 22 cm, 10/Package REF. : 17500/0010

Length: 22 cm, 1/Package REF. : 17500/0020

Length: 44 cm, 10/Package REF. : 17500/0040

Length: 44 cm, 1/Package REF. : 17500/0045



Lubricant ReproJelly

Non spermicidal lubricant, water soluble

- Iso-osmotic and sperm friendly, supports the sperm cell viability
- Batches are tested for sperm compatibility
- Ideal viscosity to better coat gloves, AI equipment and instruments

Tube with 100 ml, resealable REF. : 11907/0100

3.0 l canister, without dispenser REF. : 11907/3000

Dispenser for canister REF. : 11907/3100



TIMING OF INSEMINATION - ELISA PROGESTERONE TEST

Determining the optimal time for insemination is one of the most critical steps for successful reproduction.

MiniReader

The MiniReader is an accurate, reliable and affordable device to read and determine the results of Minitube's ELISA (= Enzyme Linked Immunosorbent Assay) based progesterone test.

REF. : 21900/0000

Applications

- Determination of the ideal time for artificial insemination
- Detection of ovulation



Your benefits

- The colour change of the sample is automatically detected and converted into ng/ml Progesterone.
- ELISA test kits contain all reagents and consumables needed to perform the analysis.
- Performing the ELISA is straight forward, with or without the means of the PipetButler.
- Manual pipetting of reagents is not needed when the PipetButler is used.
- The Progesterone concentration is based on a standard curve derived from three standards.

PipetButler

The PipetButler automates sample preparation for the ELISA test and facilitates routine work in the lab. The test kit reagents are supplied individually and loaded easily into the PipetButler. The ELISA-reagents are automatically added to the serum sample.

REF. : 21900/1000

Your benefits

- The PipetButler is equipped with a heated well tray, set to +37°C, which is the optimum temperature for ELISA reactions.
- Automatic addition of the reagents avoids handling errors.
- A light at the PipetButler indicates completion of processing steps.



Test kits

Test kit for measuring progesterone in canine serum, for 10 samples, **for manual pipetting** REF. : 21900/1110

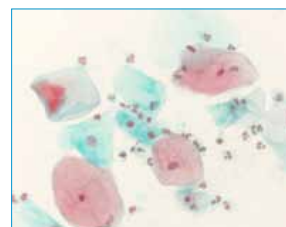
Test kit for measuring progesterone in canine serum, for 10 samples, **for use with PipetButler** REF. : 21900/1210

Shorr staining solution

Shorr staining solution for examining presence of cornification in epithelial cells of the female dog.

500 ml

REF. : 15405/0080



TRANSCERVICAL INSEMINATION

Transcervical insemination is none-invasive, not painful and typically performed without sedation.

Minitube Endoscope

- Angular eye-piece, autoclavable
- Integrated bilateral fibre glass cord
- 2 channel air insufflation / flushing side connections
- Working channel CH6 for use with instruments up to CH5
- 43 cm long
- CH9.5, distal tip CH8

REF. : 23700/1510

Your benefits

- Allows easy access to the cervix and uterus in dogs of all sizes
- Working channel enables insertion of instruments under direct visualisation for insemination, biopsy and flushing

Tower System for Endoscope

Minitube has configured a complete system for performing transcervical insemination utilising industry leader Karl Storz endoscopic components. This system in conjunction with the Endoscope and TC Cannulas provides the perfect combination of tools to effectively and efficiently perform transcervical insemination on all sizes of canines. Cart system not included.

The Tower System includes:

Veterinary III Camera	REF. : 23700/1513
Vet. halogen cold light fountain (150 W)	REF. : 23700/1512
Fiber-optic light guide cable	REF. : 23700/1514
LCD high-resolution colour monitor	REF. : 18000/0189

TC Cannula

- Clear markings every centimetre with additional indicators every 5 cm
- Supple material reinforced by a removable stylet for easy insertion
- Adapter for semen containing syringe included
- Single packed, length 70 cm

TC cannulas with single port

The eye is 0.5 cm from tip to prevent blockage

For Minitube Endoscope and others	CH4	REF. : 17500/0004
	CH5	REF. : 17500/0005
For endoscopes from other companies	CH6	REF. : 17500/0006
	CH8	REF. : 17500/0008

TC cannulas with dual port

Has an additional eye (approx 2 cm from tip and rotated 60°)

CH4	REF. : 17500/0024
CH5	REF. : 17500/0025
CH6	REF. : 17500/0026
CH8	REF. : 17500/0028

Shunt System for Endoscope

The Minitube Shunt System for transcervical insemination is a dual purpose endoscopic tool. It eliminates vaginal air loss around the Endoscope during insufflation by creating an air tight seal. The Shunt System also acts as a stabilising platform for the Endoscope during the procedure.

REF. : 17500/0070



FREEZING OF CANINE SEMEN

Semen straws 0.25/0.5 ml

Semen straw, 0.25 ml, clear, 2000/bag REF. : [13407/0010](#)

Semen straw, 0.5 ml, clear, 2500/bag REF. : [13408/0010](#)

Semen straws made by Minitube are available in many different colours, and preprinted upon request.



MPP Uno

Automatic filling and sealing machine for 0.25 and 0.5 ml straws with ultrasound sealer. Capacity 4235 straws/hour.
Power supply: 110 V/60 Hz or 230 V/50 Hz.

MPP Uno, complete REF. : [13017/0000](#)

Exchangeable straw hopper REF. : [13017/0005](#)

Filling nozzle 0.25 ml REF. : [13017/0012](#)

Suction nozzle 0.25 ml REF. : [13017/0022](#)

Filling nozzle 0.5 ml REF. : [13017/0017](#)

Suction nozzle 0.5 ml REF. : [13017/0027](#)

Washer, 5000/bag REF. : [13021/3000](#)

Filling tubing, 100/bag REF. : [13021/3800](#)



EasyCoder

Thermo transfer printer for straws with automatic straw feeder. Unmatched clean and clear, non-abrasive print. Prints up to 3 lines per straw, even with barcodes, logos and specific characters. Very simple handling, only little maintenance required. Suitable for 0.25 ml and 0.5 ml straws.

REF. : [13038/0000](#)

Colour band for straw printer EasyCoder:

Black, roll with 200 m REF. : [13038/0010](#)

Gold, roll with 300 m REF. : [13038/0012](#)

Red, roll with 300 m REF. : [13038/0015](#)

Silver, roll with 300 m REF. : [13038/0017](#)



FREEZING OF CANINE SEMEN

Freezing units

Technical details

- Simple but effective and robust standardisation of vapour freezing
- Floating rack for straws included
- The distance between straws and liquid nitrogen level can be adjusted with floating rack
- Fits 0.5 ml and 0.25 ml straws
- With high quality styrofoam chest and stainless steel inner box with working tray
- Transportable

For 20 straws REF. : 15043/0636
For 90 straws REF. : 15043/0736

Accessories

Loading block for 90 straws rack REF. : 15043/0738

Additional racks:
for freezing unit for 20 straws REF.: 5015043/0600
for freezing unit for 90 straws REF.: 5015043/0900



Storage systems for straws

Short and long triangular cassettes
for 10/20 straws 0.5 ml or 28/56 straws 0.25 ml REF. : 16981/xxxx

Short and long flat cassettes
for 3/6 straws 0.5 ml or 6/12 straws 0.25 ml REF. : 16980/xxxx



One-Way-Shipper 3.0

Single use shipper; ensures a safe shipment of temperature-sensitive semen doses. IATA conform.

Static holding time: 4 days
Capacity: 200 x 0.25/100 x 0.5 ml straws, 3 liter
Weight: 4.5 kg

REF. : 16502/0003



AUTOMATIC FREEZING

IceCube automatic freezer

Computer controlled freezer with comfortable data input and automatic recording of the freezing curve.

Technical features

- Temperature range: +40 to -180°C
- Freezing rates: 0.01 to +60°C/min
- Heating rates: 0.01 to +15°C/min
- Display accuracy: 0.01°C
- Temperature measurement via 2 Pt-100 resistance thermometers
- Capacity: approx. 900 straws per freezing cycle

Software for freeze program and control, unlimited storage of programs and processed files, colour graphic display of all temperature curves, wide possibility of parameter settings.

Dimensions: 540 x 420 x 520 mm (l x w x h). 29 kg.

IceCube 14S with 12" touch screen monitor and connector kit to be connected to computer and LN₂ pressure container

REF. : [16821/2000](#)

IceCube 14S without monitor, with connector kit to be connected to computer and LN₂ pressure container

REF. : [16821/1000](#)

Accessories

Rack for IceCube 14S, for 36 straws REF. : [16821/5036](#)

Handling rack for IceCube 14S REF. : [16821/5030](#)

Loading block for rack 16821/5036 REF. : [16821/5037](#)

Spacer for IceCube REF. : [16821/5018](#)

Liquid Nitrogen pressure container for IceCube 14S, 60 l REF. : [16820/1900](#)

Roller base for LN container REF. : [16501/0204](#)



EMBRYO TRANSFER

Micropipettor for handling of embryos. Easy and precise pipetting by handling wheel, for all sizes of capillary tubes up to 1 ml.

Type A REF. : 19022/0000

Type B REF. : 19022/0002

Glass capillary tube, 250/package

10 µl REF. : 19022/0010

20 µl REF. : 19022/0020

50 µl REF. : 19022/0050

Steripette for embryo handling, 55 mm length, sterilised, 50/package

REF. : 19025/0050

Disposable syringe 1 ml luer end, sterilised

REF. : 19025/0000

Embryo culture dish with lid, sterilised, 5 wells, rounded well edges, shallow wells for easy handling, 4/bag

REF. : 19021/0001

Embryo transport vial, 5 ml, with snap cap and round bottom, sterilised, single packed, 500/package

REF. : 19180/5006

Pen for marking, very fine, alcohol permanent (without illustration)

Black REF. : 19045/0100

Manual sealer for straws, securely seals all kinds of straws by applying heat at the end of the straws. Also seals in liquid nitrogen vapour. Consists of a plier welding head adapted for straws and a control unit for varying heat level.

REF. : 13135/2500

Vitrification unit: Set for vitrification of embryos or oocytes in OPS straws or Ministraws. Styrofoam box with stainless steel vitrification bath, material for vitrification, DVD with instructions for working with OPS straws.

REF. : 19500/2000





Minitube is an ISO 9001:2008 certified company.

